
PUBLIC HEALTH PROGRAMS AND PRACTICES

Efforts to Identify Health Technologies that Work Not Successful

Federal research efforts to find current health technologies and practices that work better than others have provided few definitive answers so far, according to the congressional Office of Technology Assessment's (OTA) report, "Identifying Health Technologies That Work: Searching for Evidence."

OTA found that the hopes for research into the effectiveness of health care are not entirely misplaced but have been overly optimistic and often misdirected. Implementing the findings of valid effectiveness research will probably improve the quality of health care, says OTA, but will not necessarily reduce health care costs significantly. Effectiveness research will be a good buy, according to OTA, if it can improve health care while paying for its own research-related costs through targeted health system cost reductions.

Many of today's health reform proposals ultimately rely on research into the effectiveness and cost-effectiveness of medical technologies, along with clinical practice guidelines backed by this research, to support the changes they envision. These proposals include strategies such as basing insurance coverage for particular technologies and services on their effectiveness and cost-effectiveness and using report cards to compare how well health care providers and plans adhere to practices known to be effective.

OTA points out that the justification for most medical practices used in the United States today rests on the experience and expertise of clinicians and patients rather than on objective evidence that these practices can measurably improve people's health. There is evidence, however, that even well-accepted and very common technologies, such as routine chest X-rays, can be ineffective, that a substantial number of medical and surgical procedures are performed for inappropriate reasons, and that different regions supply a very different amount of medical care, with very different costs, despite apparently similar levels of

underlying need, the OTA report says.

Concern about inappropriate and ineffective care led Congress to create the Agency for Health Care Policy and Research (AHCPR) in the Public Health Service in 1989 to further the evaluation of current clinical practice.

The agency's work so far has yielded many useful findings but few that actually identify the most effective medical technologies and practices. AHCPR currently does not have the mandate, the commitment, the resources, or the leverage either to fill the gaps in current research entirely itself or to coordinate successfully the effectiveness research and clinical practice guideline efforts of other agencies, says OTA. To accomplish this may require some significant changes in the research roles of several agencies, particularly AHCPR and the National Institutes of Health, along with either new resources or shifts in current priorities, according to the OTA report.

Cost-effectiveness analysis, another way of evaluating current medical technologies, can improve decision making, OTA says. The production and use of such analyses are increasing, particularly in the private sector, spurred by cost-conscious managed care administrators and other prudent health care purchasers. Problems in comparing and interpreting many of the analyses that are done, however, can make their results difficult to apply and frustrate the health care administrators trying to use them to make wise decisions.

In the report, OTA also looks at the Federal investment in clinical practice guidelines that were intended to carry the most effective treatment message to practicing clinicians. Several agencies produce guidelines, but they are uncoordinated across agencies and sometimes even present conflicting recommendations.

Some of the disappointments in the guideline development effort are attributable to the difficulty in creating an authoritative guideline when there is no good evidence and some to deficiencies in methods and implementation. The guideline process can be improved, says OTA, but it will require better coordination across agencies; better research to understand the

implications of different methods for developing guidelines; and more systematic investment in implementing the guidelines that are produced.

OTA offers a range of policy options to strengthen the field of health technology assessment and help Congress focus future efforts and resources. The OTA study was requested by the Senate Committee on Labor and Human Resources.

Copies of the 329-page report, "Identifying Health Technologies That Work: Searching for Evidence," can be obtained for \$20 from the Superintendent of Documents, P.O. Box 371954, Pittsburgh, PA 15250-7974. An 8-page summary is available at no cost by telephoning 202-224-8996.

WHO Studies Safety and Nutritional Adequacy of Irradiated Food

The main conclusion of a detailed study by the World Health Organization (WHO) entitled, "Safety and Nutritional Adequacy of Irradiated Food," is that as long as requirements for good manufacturing practice are implemented, food irradiation is safe and effective. Possible risks resulting from disregard of good manufacturing practice are not basically different from those resulting from abuses of other processing methods, such as canning, freezing, and pasteurization, the study's authors concluded.

Food irradiation, also called ionization, is a promising technique that could substantially increase the supply of safe food and thus contribute to improving public health throughout the world. Food irradiation consists of exposing items for a specific period to the action of gamma rays, X-rays, or electrons that destroy most pathogenic microorganisms present in food, thereby making food safer for consumption and extending its shelf-life by retarding spoilage. Irradiation is particularly appropriate for processing solid foods such as meat, poultry, seafood, tubers and spices, and other fresh and dried foods.

In the view of an international advisory group that WHO convened, the

new publication is needed because of the distrust, even fear, that this technology arouses in some quarters. In the face of such reactions, which are often due to a lack of information about what in fact food irradiation entails, a thorough technical review was undertaken. With more than 500 references to the scientific literature, the publication is the most comprehensive compilation WHO has ever produced on the subject.

One of the study's aims was to determine whether the chemical substances produced in foods through irradiation, called radiolytic products, could have toxic effects for consumers. The findings are entirely reassuring in this regard. Almost 40 years of research shows that radiolytic products resulting from food irradiation are very similar, if not identical, to those found in unprocessed foods, or in foods that have been processed using conventional methods.

With regard to possible additional radioactivity in foods as a result of irradiation, all available evidence shows that irradiation in the commercially useful range does not generate measurable additional radioactivity in foods which, in any case, are all naturally radioactive to some extent. The frequently mentioned possibility that irradiation might produce mutant bacteria or viruses has been ruled out in the light of available information.

It was also necessary to verify claims that irradiated foods lose some of their nutritional value. Extremely precise measurements demonstrate that the nutritional value of irradiated foods scarcely differs from that of foods processed by other methods. Where loss of vitamins is concerned, some of which are more sensitive to irradiation than others, this can be limited by irradiating foods at low temperatures or in the absence of oxygen.

Adopting a public health approach, the book concentrates on the specific scientific questions that must be answered before government authorities can approve irradiation as a safe technique for reducing the incidence of foodborne diseases, preventing food losses, and extending shelf-life.

According to WHO, up to 70 percent of the diarrheal disease that causes about 25 percent of all deaths in developing countries is estimated to have food as the transmission vehicle for the causative agents. In the United States, there are between 24 and 81

million cases of foodborne diseases every year and some 10,000 related cases of needless death. Salmonellosis alone accounts for about 2 million of these cases and is estimated to cost at least \$1.5 billion annually.

In 1993, on the west coast of the United States, illness caused by an extremely virulent strain of *E.coli* in undercooked hamburgers killed four children, hospitalized almost 200 people, and otherwise made quite sick more than 700 adults and children.

Following this event, an independent panel of experts convened by the American Gastroenterological Association Foundation concluded that complete elimination of this bacteria "is currently impossible unless the product (meat) is thoroughly cooked or irradiated." Given the potential magnitude of the health problem related to hamburger consumption in the United States, this conclusion received wide publicity, and a petition to use irradiation to ensure hygienic quality of beef was recently submitted to the Food and Drug Administration (FDA). FDA had earlier approved the use of irradiation to ensure the safety of spices, poultry and pork, as well as for insect disinfection and shelf-life extension of wheat and fresh food of plant origin.

Worldwide, some 40 countries have approved the use of irradiation for various kinds of food, and about 30 of these are applying the technology on a limited commercial scale. The Agreement on Sanitary and Phytosanitary Measures was recently adopted as part of the Uruguay Round of Multilateral Trade Negotiations. When the agreement enters into force in 1995, members of the World Trade Organization could be required to provide justification for import restrictions for foods including irradiated foods that comply with international standards, guidelines and recommendations. In 1983, the Joint FAO/WHO Codex Alimentarius Commission had adopted the Codex General Standard for Irradiated Foods.

"Safety and Nutritional Adequacy of Irradiated Food," 161 pages, ISBN 924 1561629, is available from the Distribution and Sales Service, WHO, Geneva, Switzerland. Further information can be obtained from Dr. Fritz Kaferstein, Chief, Food Safety Unit, WHO, Geneva, tel. (41 22) 791 3535.

Tuberculosis, HIV Co-epidemic to Multiply Sevenfold in Asia

The number of people in Asia who develop tuberculosis because they are infected with both the human immunodeficiency virus (HIV) and the TB bacillus is expected to multiply nearly seven fold this decade, according to the World Health Organization (WHO).

Preliminary figures on HIV-TB co-infection in the region are remarkably high, according to a statement issued by the WHO TB Program during the 10th International Conference on AIDS in Yokohama, Japan in 1994. In several studies, between 52 and 70 percent of people with AIDS in Thailand, India, and Nepal have developed TB.

"TB and HIV are feeding off each other at an alarming rate," said Dr. Arata Kochi, Manager of the WHO TB Program. "When they're together, they multiply each other's impact."

A person with TB-HIV infection is nearly 30 times more likely, in any given year, to become sick with TB than a person infected with just TB. Tuberculosis can also further suppress the immune system of an HIV-infected person and accelerate the occurrence of other opportunistic infections.

With nearly half of all people in Asia already infected by TB, and HIV infection increasing, WHO warned that there is no end in sight as to how bad the dual epidemics might get.

"In Asia, the number of annual TB deaths in co-infected people is doubling every 3 years," said Dr. Kochi. "We expect Asia to surpass Africa in the number of annual TB-HIV deaths by the year 2000. The unfortunate truth is that most Asian governments have yet to respond by putting effective TB programs in place to stop the co-epidemic's acceleration."

The situation is also deteriorating in other parts of the world. WHO estimates that 5.6 million people worldwide were dually infected with HIV and TB by mid-1994, and that this number will increase to nearly 14 million by the year 2000. HIV-infected people will account for nearly 10 percent of the 30 million people likely to die from TB in the next decade.

"The TB and HIV epidemics are each notorious killers in their own right," said Dr. Kochi. "We cannot defeat one without attacking both. While we search for a cure for AIDS,

we need to begin now making more extensive use of the effective medicine we already have to cure people who have TB."

Tuberculosis medicines cost as little as \$13 in developing countries and are almost completely effective. Currently, one of the most affordable and feasible ways to extend the lives of people with HIV is to treat opportunistic infections such as TB. Likewise, effective HIV prevention will ultimately reduce the number of new TB cases and deaths.

Dr. Kochi emphasized that although the two epidemics are fueling each other, they are still very distinct health problems. "Different weapons are needed for fighting each of these diseases," said Dr Kochi. "For AIDS, the emphasis is on changing sexual behavior and on research to find a vaccine and a cure. For TB, an effective and inexpensive cure already exists, so the emphasis must be on setting up more treatment programs in more parts of the world. Countries need strong TB programs as well as strong AIDS programs."

Nearly \$28 Million for AIDS Care Programs

The Health Resources and Services Administration (HRSA), an agency of the Public Health Service, has approved the award of \$27.8 million in grants for two categories of AIDS prevention and assistance programs.

In the first AIDS category, \$20.7 million goes to a wide variety of organizations and State and local agencies, from Catholic Charities in Fort Worth, TX, and Montefiore Medical Center in the Bronx, NY, to the Great Lakes Hemophilia Foundation and the Larkin Street Youth Center in San Francisco for AIDS programs for children and their families.

In the second, nine model programs of HIV care delivery will receive \$3.7 million in grant support to expand or duplicate for other populations their successful service delivery models.

The grants were authorized by the Ryan White Comprehensive AIDS Resources Emergency (CARE) Act, the first under Title IV and the second under the Special Projects of National Significance Program.

The special projects program supports research on the best ways to deliver health and support services to

The HIV-TB outlook in Asia¹ compared with the rest of the world

Morbidity-mortality	1990		1995		2000	
	Asia	World	Asia	World	Asia	World
Annual illnesses:						
TB cases (millions).....	4,945	7,537	5,544	8,768	6,207	10,222
TB cases among HIV positive people (thousands).....	85	317	282	738	639	1,410
Percent of all TB cases attributable to HIV	1.7	4.2	5.1	8.4	10.3	13.8
Annual deaths:						
TB deaths (millions).....	1,731	2,530	1,940	2,977	2,172	3,509
TB deaths among HIV positive people (thousands).....	30	116	99	266	224	500
Percent of all TB deaths attributable to HIV.....	1.7	4.6	5.1	8.9	10.3	14.2

¹Includes Southeast Asia and Western Pacific.

underserved and hard to reach populations with HIV-AIDS. The grants will go to model care programs in seven States and the District of Columbia. The programs range from refining, disseminating, and duplicating a successful case management system for HIV-positive Native Americans to extending a model of primary and mental health care for families affected by HIV.

The nine grantees are

National Native American AIDS Prevention Center, Oakland, CA; Indiana State Department of Health HIV-AIDS Division, Indianapolis; Protection and Advocacy System, Inc., Albuquerque, NM; Multnomah County Health Department, Portland, OR; Children's Hospital National Medical Center, Washington, DC; Family Planning Council of Southeastern Pennsylvania, Philadelphia; Children's Hospital, New Orleans, LA; The Fortune Society, New York, NY; Montefiore Medical Center, Bronx, NY.

Children's Defense Fund Annual Conference Slated for March in Seattle

The Children's Defense Fund's 1995 Annual National Conference, on the theme, "Leave No Child Behind: Building and Strengthening Communities for Children," will be held March 9-11, 1995, at the Washington State Convention and Trade Center in Seattle, WA.

Conference highlights include

- Practical information to take home to help every child get a Healthy Start, a Head Start, a Fair Start, and a Safe Start in life;
- A new vision for community partnerships for children;
- A plenary session message from Fund President Marian Wright Edelman;
- Workshops on programs and policies that really work for children;
- A Moral Witness for Children, an interfaith service celebrating children and the commitment to them;
- Networking with others from around the nation and in the community; and
- Skills training sessions.

Information on the conference can be obtained by calling the hotline at 202-662-3684.

Programs for Children with Special Needs Get \$3.4 Million

A total of \$3.4 million has been approved for special projects aimed at promoting the health of children with special medical needs in managed care programs.

The 27 grants have been made by the Health Resources and Services Administration of the Public Health Service to institutions of higher education, States, and nonprofit organizations under the Special Projects of

National Significance Program of the Ryan White Comprehensive AIDS Resources Emergency Act.

Managed care and other reforms underway in some States can have a significant impact on children with special health care needs. Providing continuity of care, comprehensive services, coordination and access often requires a more targeted approach.

As medical care systems change, services for hard-to-reach, high-risk and culturally diverse populations can sometimes get lost or overlooked. These grants will help both health care professionals and the families of children with special needs understand how managed care works and will ensure that high quality, cost-effective health care services will be available for these children.

Grant recipients fell into four categories—provider preparation, to enhance primary care and public health professionals' understanding of managed care; consumer participation, to make families aware of how managed care works; quality assurance, maintenance and monitoring; and cost and utilization, high cost services.

WHO Committee Recommends Destroying Last Smallpox Virus Stocks

The World Health Organization's (WHO) Ad Hoc Committee on Orthopoxvirus Infections has recommended that the last remaining stocks of smallpox (variola) virus should be destroyed on June 30, 1995.

A majority of the committee agreed that the time of destruction should allow the World Health Assembly to confirm this recommendation at its meeting in May 1995.

The stocks include clinical specimens and other materials containing infectious variola virus that are being held in the WHO Collaborating Centers for Smallpox and other Poxvirus Infections in the Centers for Disease Control and Prevention in Atlanta, GA, and in the Institute for Viral Preparations in Moscow, Russian Federation. Recommendations on the procedure for destroying the variola virus and for the certification of its destruction were also issued.

Cloned DNA fragments of variola virus genome are themselves not infectious and provide a useful resource

for analyzing variola virus genes and protein structure and function. The members of the Ad Hoc Committee recommended that such cloned material be kept. The Committee recommended the establishment of two international repositories for the storage, distribution, and monitoring of the cloned material—at CDC and at the Russian State Research Center of Virology and Biotechnology in Koltsovo.

The Committee also recommended that smallpox vaccine (500,000 doses) be kept by WHO in case of an emergency and that the vaccine seed virus (strain Lister Elstree) be maintained in the WHO Collaborating Centre on Smallpox Vaccine at the National Institute of Public Health and Environmental Protection in Bilthoven, The Netherlands.

The eradication of smallpox is among the greatest public health achievements of all time. This success resulted from an unprecedented international effort coordinated by WHO and was recognized by the 33rd World Health Assembly that declared on May 8, 1980, the global eradication of smallpox. The last known natural case of smallpox was detected in Somalia in October 1977.

Less than 30 years ago, smallpox was endemic in 31 countries. At that time, between 10 and 15 million people were stricken with the disease each year: of these, nearly 2 million died and millions of survivors were disfigured or blinded for life. Smallpox was the first disease ever to be eradicated.

The concept of total global eradication calls not only for the elimination of the disease but also for the complete removal of the causative agent. During their first meeting in March 1986, members of the WHO Committee on Orthopoxvirus Infections unanimously recommended destruction of the virus stocks kept in the two laboratories.

The Committee also recommended, however, that the genetic blueprint of the variola virus should be determined and archived prior to destruction of the remaining stocks of the virus. To further understanding of this highly virulent virus and to be able to conduct proper diagnostic tests, if need be, it was decided to carry out complete sequencing of the genome.

At the end of the last meeting of the WHO Technical Committee on the Analysis of Nucleotide Sequences of Variola Virus Genomes, held in Ge-

neva in January 1994, Dr Bernard Moss, of the National Institutes of Health in Bethesda, MD, concluded, "Now we are fully satisfied that the genetic 'blueprint' of variola virus has been properly archived for posterity. Should the need arise, we will be able to conduct diagnostic tests with 100 percent accuracy."

The publication of the Ad Hoc Committee's recommendation to destroy the variola viruses had, however, triggered mixed reactions from both the public and the scientific community. The arguments for and against destruction can be summarized as follows:

Against destruction:

- All possibility of future studies on the virus will be lost;
- Destruction of the viruses in the two known repositories does not guarantee the complete removal of the virus from the earth (preserved corpses of persons with smallpox, forgotten or hidden stocks elsewhere);
- The decision to destroy the virus is politically, and not scientifically, motivated.

For destruction:

- The escape of the virus from the laboratories and its use for terrorist purposes would be a serious risk as an increasing proportion of the population lacks immunity to the disease;
- The sequence information and the cloned DNA fragments of full genome of several strains of variola virus allow further scientific research on the properties of the viral genes and proteins to continue. The cloned DNA fragments of the virus genome are noninfectious and can be handled in complete safety.
- The decision to eradicate smallpox was a collective decision of the world community, based on public health considerations. Eradication is an absolute term and includes not only the elimination of the disease, but also the complete removal of the causative agent.

NIGMS Reorganizes, Moves on NIH Campus

The National Institute of General Medical Sciences (NIGMS) has undergone a reorganization to enhance its effectiveness and efficiency in supporting basic biomedical research and research training, as well as to align

NIGMS' organizational structure and position titles with those of other NIH institutes.

The Institute has also moved to a new building, the William H. Natcher Building, on the main National Institutes of Health (NIH) campus in Bethesda, MD.

The most significant change is the rearrangement of four program branches—Cellular and Molecular Basis of Disease; Genetics; Biophysics and Physiological Sciences; and Pharmacology and Biorelated Chemistry—into three divisions: Cell Biology and Biophysics; Genetics and Developmental Biology; and Pharmacology, Physiology, and Biological Chemistry. Two other Institute components also become divisions: the Division of Minority Opportunities in Research and the Division of Extramural Activities.

According to Dr. Marvin Cassman, Acting Director of NIGMS, "The reorganization reflects the increasingly interdisciplinary nature of the research funded by NIGMS. By refining the distribution and balance of scientific areas among the divisions, we will improve the Institute's ability to promote and support the most innovative basic research of the future."

Other changes involve modifications of organizational names and the movement of several administrative offices to more appropriate organizational levels. A summary of the research areas covered by the three new main NIGMS divisions is shown.

Division of Cell Biology and Biophysics

- analytical and separation techniques
- bioengineering
- biomedical instrumentation
- cell organization, motility, and division
- lipid biochemistry
- membrane structure and function
- molecular biophysics
- spectroscopic techniques
- structural biology

Division of Genetics and Developmental Biology

- cell growth and differentiation
- chromosomal organization and mechanics
- control of gene expression
- developmental genetics and cell biology
- extrachromosomal inheritance
- human medical genetics
- mechanisms of mutagenesis

- molecular immunobiology
- neurogenetics and the genetics of behavior
- population genetics
- replication, recombination, and repair of genes

Division of Pharmacology, Physiology, and Biological Chemistry

- anesthesiology
- biochemistry
- bioenergetics
- bio-organic and bio-inorganic chemistry
- biotechnology
- glycoconjugates
- medicinal chemistry
- pharmacology
- physiology
- synthetic chemistry
- trauma and burn injury

The move to the Natcher Building brings the entire NIGMS staff to the NIH campus for the first time in more than 30 years. All mail to NIGMS staff members should be addressed—

NIGMS, NIH, 45 Center Dr., MSC 6200, Bethesda, MD 20892-6200.

HRSA Studies Hill-Burton Patient Demographics

The Division of Facilities Compliance, Bureau of Health Resources Development, Health Resources and Services Administration (HRSA) conducted a study of 50 facilities nationwide to determine the demographic characteristics of the population receiving medical services under the Hill-Burton Uncompensated Services Program and the conditions for which treatment was required. These characteristics and conditions were compared to those of the general population.

Data were obtained from both Hill-Burton records and patient medical records from each of the 50 facilities selected for participation in the study. Records from 4,835 patients were examined, for an average of 96.7 records per facility. The availability of data ranged from 100 percent in all facilities for certain characteristics (sex and inpatient-outpatient treatment) to 93.4 percent (race).

Researchers found that the Hill-Burton population

- was predominantly female (57.7 percent);

- was slightly younger than the general population (median age of 32 versus 34.1);
- was usually living without a spouse (61.4 percent single, widowed, divorced, or separated);
- was more likely to be white (80 percent). Of the remainder, 12.3 percent were African American, 7 percent were Hispanic, and Asian and Native Americans were less than 1 percent each. The racial data showed the Hill-Burton population identical to the general service populations of the facilities in the study;
- had a median household size of 2;
- had a median annual household income of \$7,200;
- generally had no insurance coverage (69.4 percent had no insurance, and 80.1 percent had no insurance coverage for the services received);
- followed the general pattern of being treated on an outpatient basis (66.1 percent); and
- incurred a median charge for treatment of \$426, of which the median Hill-Burton claim was \$300, and the median portion of medical expenses for which the patient was responsible was 29.6 percent, or \$126.

Specific Diagnostic Related Groups and International Classification of Diseases Codes (9th Revision, Clinical Modification) were obtained for each medical record reviewed. The population identified in this study required services classified as injury, obstetrical, and ill-defined conditions more often than the general population.

Since 1946, the Hill-Burton Program has provided Federal funding to health care facilities that agreed to provide a reasonable volume of uncompensated medical services to persons unable to pay. This program sought to provide health care to persons who lack adequate health insurance coverage and who were least able to access medical care because they were below or just above the Federal poverty level.

The HRSA study was the first to document the demographic characteristics and the medical needs of persons who received services under the Uncompensated Services Program. The findings indicated that these people were more likely to be female, young adult, and unmarried with very low household incomes.

Although having provided a major mechanism by which needy patients

received uncompensated care in the past, the Hill-Burton Program is winding down as fewer facilities remain obligated. Presumably, the health status of this group may be in danger because no substitute program currently exists at a national level. If this source of medical care is reduced or eliminated, the population of single, young adults may be placed at higher risk.

Copies of the 31-page monograph, "The Demographic and Treatment Characteristics of the Hill-Burton Population," may be obtained from Charlotte G. Pascoe, Director, Division of Facilities Compliance and Recovery, HRSA, Room 7-31, Parklawn Building, 5600 Fishers Lane, Rockville, MD 20857; tel. 301-443-5656.

OTA Reports, NIH Center Signal Increased Federal Focus on Osteoporosis

Two reports by the congressional Office of Technology Assessment (OTA) and a National Institutes of Health (NIH) grant reflect an expanding Federal commitment to combating osteoporosis, a disease that affects more than 25 million Americans, 80 percent of them women.

One OTA report addresses the availability of information about osteoporosis for the public, and the other focuses on the adverse patient outcomes from hip fractures.

At the same time, Dr. Lawrence E. Shulman, Director of NIH's National Institute of Arthritis and Musculoskeletal and Skin Diseases, announced the establishment of a National Resource Center on Osteoporosis and Related Bone Diseases with a 4-year grant.

The project will be carried out by a consortium of organizations led by the National Osteoporosis Foundation (NOF). Joining NOF as part of the new National Resource Center are the Paget Foundation and the Osteogenesis Imperfecta Foundation.

The OTA report entitled, "Public Information About Osteoporosis: What's Available, What's Needed?" concludes that although a significant quantity of public information is available, the public remains largely uninformed about this life-threatening and life-diminishing disease.

OTA specifically cites two surveys, a 1991 Gallup poll commissioned by the

National Osteoporosis Foundation which found that 70 percent of women at high risk for osteoporosis had never talked to their physicians about the disease because they did not see the need or were not concerned about the disease and the Commonwealth Fund's Commission on Women's Health 1993 study which found that 70 percent of adult women are not very familiar with osteoporosis.

A more recent survey, commissioned by the Older Women's League and released since the OTA report was finalized, confirms that although 90 percent of women recognize osteoporosis as a serious disease, more than 60 percent "do not worry or worry little" about osteoporosis.

The other OTA report, "Hip Fracture Outcomes in People Age Fifty and Over" concludes that the 300,000 hip fractures occurring in the United States annually have many negative outcomes including excess mortality, long-term functional impairment, and high medical costs.

Statistics cited in the OTA report reveal that an average of 24 percent of hip fracture patients ages 50 and older die in the year following their fracture, 41 percent were discharged from the hospital into a nursing home and, by the end of 1 year, one-third were still in the nursing home.

The OTA report concludes that steps must be taken throughout life to reduce the incidence of life-threatening hip fractures. The OTA report outlines the necessary steps, "to increase bone mass and bone strength in young people, maintain bone mass and strength in middle-aged and older people, diminish the environmental and patient characteristics that lead to falls in older people, and protect older fallers from fracture."

Furthermore, OTA finds that existing public information is not sufficiently tailored to the different needs of particular population groups and does not sufficiently reach them.

Copies of "Public Information About Osteoporosis: What's Available, What's Needed?," stock number 052-003-01381-9, can be obtained for \$4.75 each, and "Hip Fracture Outcomes in People Age Fifty and Over," stock number 052-003-01379-7, for \$6.50 each, both from the Superintendent of Documents, P.O. Box 371954, Pittsburgh, PA 15250-7974; FAX 202-512-2250.

\$9.7 Million from AHCPR to Improve Rural Health

The Public Health Service's Agency for Health Care Policy and Research (AHCPR) has awarded grants totaling \$9.7 million to help rural research centers in Maine, West Virginia, Oklahoma, Nebraska, Iowa, and Arizona demonstrate ways to deliver health care services to people living in nonurban areas.

AHCPR Administrator Clifton R. Gaus, ScD, said the focus will be on innovations that have been introduced in urban areas as a result of market forces but that for economic or other reasons are not generally available in rural areas.

"A significant activity of the centers will involve promoting establishment of managed care institutions and development of rural health networks," Dr. Gaus said.

He added that he expects the efforts by the rural centers will lay the groundwork for planning future statewide or regional managed care systems that will make primary care and clinical preventive care services more available to rural residents.

Rural populations have been found to be in poorer health than most groups in urban and suburban communities.

"There are many, complex reasons why this may be so," Dr. Gaus said. "Limited public transportation, unemployment rates above the national average, and a shortage of health professionals in rural areas may all play a role."

He indicated that rural center researchers will help identify these factors more precisely.

In addition to demonstrating innovations in delivery of health care services, the rural centers will develop information systems to provide essential data on health care costs and other information. Such systems could allow health care administrators to monitor the quality and overall performance of rural health care systems, and to make improvements in them.

The following institutions have entered into cooperative agreements with AHCPR and are recipients of rural center grants:

University of Southern Maine, Portland; West Virginia University, Robert C. Byrd Health Sciences Center, Morgantown; University of Oklahoma

Health Sciences Center, Oklahoma City; University of Nebraska Medical Center, Omaha; University of Iowa, Iowa City; and University of Arizona, Tucson.

Rural Medicine Research Center in Wisconsin to be Expanded

A rural medicine research center at Wisconsin's Marshfield Clinic, committed to the medical needs of 62 million Americans who live in rural areas, will be expanded into a new building named for former Secretary of Defense and 9-term Wisconsin Congressman, Melvin R. Laird.

In the new Laird Center, research will focus on pioneering applications of molecular genetics combined with preventive medicine as well as rural health and safety. It will also house a nearly untapped resource for research—a repository of five generations of medical records from a stable population of area families that can be applied to pursue the genetic basis of disease and to new forms of genetic screening.

The proposed bank of genetic material gathered from multiple generations will provide a unique resource for application of genetic research to preventive medicine, according to Marshfield Clinic President Richard A. Leer, MD. He added that a planned electronic, interactive medical library will allow Marshfield scientists and physicians to exchange information with researchers and colleagues around the world.

The center marks a milestone in Laird's long relationship with the Marshfield Clinic.

"No where else is there such a continuity of patients records. There is no better place to conduct long-term epidemiologic research than in Marshfield," he said.

As a Congressman from central Wisconsin, Laird helped secure the first Federal and private research grants for Marshfield's research foundation in 1959.

The \$8 million Laird Center, built entirely with private funds, will reflect Marshfield's 78-year commitment to rural health care delivery and farm safety and its 35-year history of medical and scientific research.

The clinic is one of the largest private health care networks in the

United States. The system has invested more than \$100 million in economically fragile areas in Wisconsin, creating a network of 25 clinic locations served by 430 physicians, equipped for telemed to give diagnosis and treatment through interactive fiber optics.

International Conference on History of Medicine and Health Care Slated

The University of Pittsburgh and Carnegie Mellon University (CMU) will host an international conference that will bring together historians and clinicians from many medical history groups May 10-14, 1995, in Pittsburgh.

The gathering will include the 68th annual meeting of the American Association for the History of Medicine (AAHM).

"This conference is the first of its kind, and it will provide an unprecedented opportunity for interaction among clinicians and medical historians from various disciplines," said Jonathon Erlen, PhD, Curator of the History of Medicine at the University of Pittsburgh's Falk Library of the Health Sciences.

The conference will include presentations about a wide variety of historical topics in medicine, nursing, pharmacology, and dentistry. In addition, there will be a book fair with current and antiquarian book dealers.

Among the groups expected to be represented are the AIDS History Group, Alcohol and Temperance History Group, American Academy of the History of Dentistry, American Association for the History of Nursing, American Institute for the History of Pharmacy, American Osler Society, Anesthesia History Society, Canadian Society for the History of Medicine, East Asian History of Medicine Society, European Association for the History of Medicine and Health, History of Psychiatry Group, Society for Ancient Medicine, Society for the Social History of Medicine, and the Wellcome Institute for the History of Medicine.

Conference organizers include Thomas Benedek, MD, Professor of Medicine at the University of Pittsburgh School of Medicine and President of the AAHM; Mary Lindemann, PhD, Associate Professor and Director of Graduate Studies at CMU's history

department; and Dr. Erlen, local arrangements chairman.

Registration fee for the conference is \$90; graduate and medical students may register for \$35. Daily registration is available for \$40. Fourteen category I continuing medical education credits will be offered.

Registration information may be obtained from Dr. Jonathon Erlen, 123 Northview Dr., Pittsburgh, PA 15209; telephone 412-648-8927 or through e-mail at jon@med.pitt.edu.

13 Medical Schools Get PHS Funds for Primary Care Education Programs

The Public Health Service (PHS) has awarded \$3.2 million to 13 medical schools to support model primary care education programs.

The awardees match Federal funds 50-50 with State and local resources to assist in fulfilling the primary care training needs of the State. The program, which began in 1993, is administered by PHS' Health Resources and Services Administration.

The Model State-Supported Area Health Education Program awards link university health science centers with community-based educational and clinical resources to provide primary care training to health professions students, residents, and practitioners in community health facilities.

HRSA Administrator Ciro V. Sumaya, MD, MPHTM, said, "The Model State Supported AHEC Program is a prime example of a Federal-State approach that supports regional solutions to local problems of primary care provider shortages. It's been shown that retention of health professionals in underserved areas goes up when practitioners are from the community they serve, and that's exactly what this program encourages."